

AMENDMENTS

Please enter the following amendments:

IN THE SPECIFICATION

Page 27, line 28, please delete "eukariotic" and insert therefor --eukaryotic--.

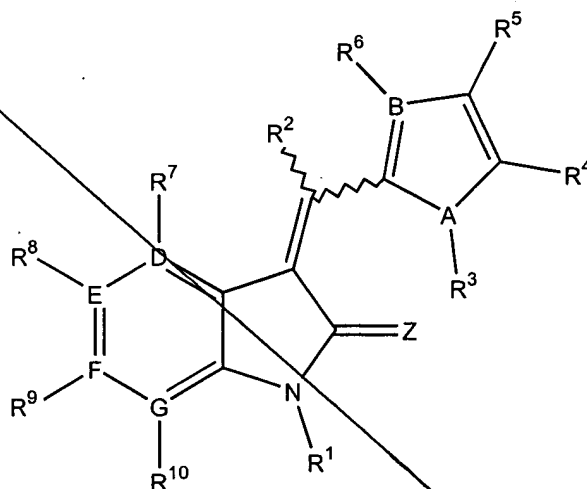
Page 78, line 11, please delete "compunds" and insert therefor --compounds--.

IN THE CLAIMS:

Please cancel claims 10, 17, and 38-40, without prejudice to or disclaimer of the subject matter contained therein.

Please amend the following claims:

1 (AMENDED) ~~A-3-heteroarylidenaza~~indolin-2-one compound having the following chemical structure:



wherein,

A is selected from the group consisting of nitrogen, oxygen and sulfur and it is understood that when A is oxygen or sulfur, R³ does not exist and there is no bond;

B, D, E, F and G are independently selected from the group consisting of carbon and nitrogen [but at least] wherein only one of D, E, F and G [must be] is nitrogen and the other of D, E, F,

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and G are carbon, and it is understood that when B, D, E, F or G is nitrogen, R^6 , R^7 , R^8 , R^9 and R^{10} , respectively, do not exist and there is no bond;

Z is selected from the group consisting of oxygen, sulfur and NR^{11} wherein,

R^{11} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, carbonyl, C-carboxyl, O-carboxyl, C-amido, guanyl, sulfonyl and trihalomethanesulfonyl;

R^1 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, trihalomethanecarbonyl, sulfonyl, trihalomethanesulfonyl, C-carboxyl, O-carboxyl, C-amido, and guanyl;

R^2 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl and halogen;

when A is nitrogen,

R^3 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, carbonyl, C-carboxyl, O-carboxyl, C-amido, guanyl, sulfonyl and trihalomethanesulfonyl;

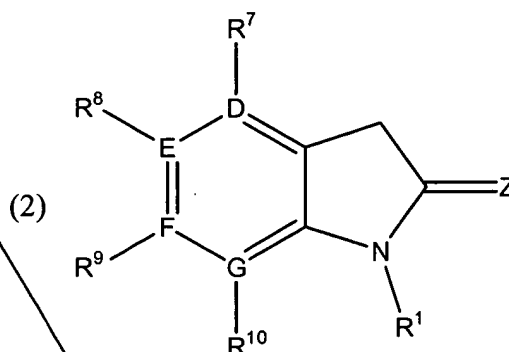
R^4 , R^5 , R^6 , R^7 , R^8 , R^9 and R^{10} are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, thiohydroxy, thioalkoxy, thioaryloxy, sulfinyl, sulfonyl, S-sulfonamido, N-Sulfonamido, trihalomethanesulfonyl, carbonyl, C-carboxyl, O-carboxyl, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, guanyl, guanidino, ureido, amino and $-NR^{12}R^{13}$, wherein

R^{12} and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and, combined, a five- or six-member heteroalicyclic ring containing at least one nitrogen; and,

R^4 and R^5 or R^5 and R^6 may combine to form a six-member cycloalkyl, aryl, heteroaryl or heteroalicyclic ring;

and the physiologically acceptable salt and prodrugs thereof.

1. (AMENDED) A method for synthesizing an indolinone compound of any one of claims 1-17 comprising the step of reacting a first reactant with a second reactant in a solvent and in the presence of a base at elevated temperatures, wherein said first reactant is an azaindolin-2-one having the structure set forth in formula 2



wherein

D, E, F and G are independently selected from the group consisting of carbon and nitrogen [but at least] wherein only one of D, E, F and G [must be] is nitrogen and the other of D, E, F, and G are carbon, and it is understood that when D, E, F or G is nitrogen, R⁷, R⁸, R⁹ and R¹⁰, respectively, do not exist and there is no bond;

R⁷, R⁸, R⁹ and R¹⁰ are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, thiohydroxy, thioalkoxy, thioaryloxy, sulfinyl, sulfonyl, S-sulfonamido, N-Sulfonamido, trihalomethanesulfonyl, carbonyl, C-carboxyl, O-carboxyl, C-amido, N-amido, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, guanyl, guanidino, ureido, amino, and -NR¹²R¹³, wherein

R¹² and R¹³ are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and, combined, a five- or six-member heteroalicyclic ring containing at least one nitrogen; and,

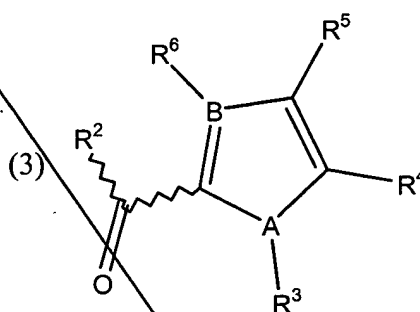
Z is selected from the group consisting of oxygen, sulfur and NR¹¹ wherein,

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R^{11} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, carbonyl, C-carboxyl, O-carboxyl, C-amido, guanyl, sulfonyl and trihalomethanesulfonyl; and

R^1 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, trihalomethanecarbonyl, sulfonyl, trihalomethanesulfonyl, C-carboxyl, O-carboxyl, C-amido, and guanyl;

and wherein said second reactant is an acyl compound having the structure set forth in formula 3



wherein

A is selected from the group consisting of nitrogen, oxygen and sulfur and it is understood that when A is oxygen or sulfur, R^3 does not exist and there is no bond;

B is selected from the group consisting of carbon and nitrogen and it is understood that when B is nitrogen, R^6 does not exist and there is no bond;

R^2 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl and halogen;

when A is nitrogen,

R^3 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, carbonyl, C-carboxyl, O-carboxyl, C-amido, guanyl, sulfonyl and trihalomethanesulfonyl;

R^4 , R^5 , and R^6 are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy,